

Contact: Diana Gonzalez

IOWA LAKESIDE LABORATORY REGENTS RESOURCE CENTER
2013-2014 ANNUAL REPORT AND 2014-2015 BUDGET

Actions Requested: (1) Receive the 2013-2014 annual report of the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) and (2) recommend approval of the 2014-2015 budget for the Center.

Executive Summary: The ILLRRC annual report describes the activities undertaken in 2013-2014 to address the Center's Strategic Plan. The proposed budget (Attachment A) describes the planned objectives for 2014-2015. The proposed 2014-2015 budget for the Iowa Lakeside Laboratory Regents Resource Center has been reviewed by the Board Office and the Council of Provosts and is recommended for approval.

Background: For more than 100 years, Iowa Lakeside Laboratory has provided educational opportunities to the state of Iowa; the Regent universities offer science-based courses that allow students to study nature first-hand. The Regent Enterprise recognizes that its educational offerings can address a variety of statewide needs, including lifelong learning, especially for place-bound individuals; economic development; and entrepreneurship.

In September 2006, the Board of Regents approved (a) a name change from the Lakeside Laboratory to the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) to reflect its expanded functions, (b) a Strategic Plan which defined the mission, vision, and values, as well as short- and long-term objectives for the Center, (c) an increase in annual Regent university allocations from \$553,000 to \$600,000 for a five-year period,¹ and (d) assigning administrative responsibility for the Center to the University of Iowa through the Associate Provost and Dean of Continuing Education.

The ILLRRC Strategic Plan provided a springboard to expand the opportunities available through the Center (1) to meet the educational needs of northwest Iowa through the following key functions – scientific research, lifelong learning, entrepreneurship, and community involvement; and (2) to develop a model that can be used throughout the state to address unmet educational needs.

The Board also directed the Board of Regents Executive Director or designee and the Regent universities to conduct an in-depth evaluation during the fourth year (2010-2011) to determine both the continued viability of the Iowa Lakeside Laboratory Regents Resource Center and the ability to replicate the model throughout the state. The evaluation led to the development of a new strategic plan for the Center.

The ILLRRC continues to make progress by providing unique educational programs to university students, the public, K-12 students, and by collaborating with local associations and the Iowa Department of Natural Resources. During 2013-2014, the Center addressed its Strategic Plan's goals through the following activities.

¹ The universities' total allocation dropped below \$600,000 during the last three years and in the proposed budget.

1. **Increase enrollment and educational opportunities in science and other areas, such as art, writing, and business; increase enrollment in the undergraduate honors research program.**

- 📖 Aquatic Ecology (4 weeks; May 19 – June 13, 2014)
- 📖 Ecology and Systematics of Diatoms (4 weeks; May 19 – June 13, 2014)
- 📖 Conservation Biology (4 weeks; June 16 – July 11, 2014)
- 📖 Ecology and Systematics of Algae (4 weeks; June 16 – July 11, 2014)
- 📖 Field Archeology (4 weeks; June 16 – July 11, 2014)
- 📖 Field Archeology (2 weeks; June 30 – July 11, 2014)
- 📖 Field Archeology (1 week; June 23 – June 27, 2014)
- 📖 Ecology (4 weeks; May 19 – June 13, 2014)
- 📖 Topics in Ecology and Sustainability: Fire Ecology (1 week; May 26 – May 30, 2014)
- 📖 Topics in Ecology and Sustainability: Wetlands and Stream Ecology (2 weeks; May 19 – May 30, 2014)
- 📖 Topics in Ecology and Sustainability: Limnology (2 weeks; June 2 – June 13, 2014)
- 📖 Topics in Ecology and Sustainability: Environmental Writing and Writers (2 weeks; July 14 – July 25, 2014)
- 📖 Topics in Ecology and Sustainability: Introduction to Prairie Ecology (2 weeks; June 16 – June 27, 2014)
- 📖 Topics in Ecology and Sustainability: Pollination Ecology (2 weeks; July 14 – July 25, 2014)
- 📖 Topics in Ecology and Sustainability: Epidemiology as Ecology (2 weeks; July 14 – July 25, 2014)
- 📖 High School Aquatics Microbiology Camp (1 week; July 14 – July 18, 2014)

In addition to the formal courses listed above, the ILLRRC also sponsors artists who provide public programs and attempt to integrate science courses with art. Examples are provided on the following pages.

2014 Artists in Residence

Allen Morris, Photography In Residence: May 11 to May 24



Allen is an Oregon-born photographer working towards his MFA at the University of Nebraska – Lincoln. His recent work has focused on the Nebraska prairie, and his relationship to it as an outsider searching for a place within it. Allen's work includes archival pigment prints, alternative process photographs, and gelatin silver prints. He uses landscape photography to address themes such as place/displacement and to discuss personal history.

Allen's Community Project: will take place Saturday May 17 in the Waitt Science Classroom. He will guide participants through "anthotype printing," a sustainable printing process that uses plant materials to develop photographs.

Jacob Gorke, Painting, Sculpture, Photography In Residence: May 21 to June 13

Jacob is an artist from Syracuse, New York and a recent graduate from the NYS College of Ceramics at Alfred University. His work depicts keystone species of fish indigenous to New York and Canada. He documents and shares their existence through "catch and release" practices, photography, painting, and sculpture. He is passionate about exploring how human activity effects ecosystems, and his projects tend to overlap with local conservation groups.

Jacob's Community Project will work with the Lab's field classes. He is developing an artistic biological survey for the classes to participate in.



2014 Artists in Residence

Benny Melton, Painting In Residence: June 1 to June 14



Benny was born in South Dakota and raised in Mississippi, and now enjoys a type of dual-citizenship in regions of the country which are rich in natural beauty and shared agrarian traditions. He enjoys painting landscapes and people in the landscape.

Benny was employed in Chemical Manufacturing for 25 years in Yazoo City, Mississippi and five years in Sioux City, Iowa. His paintings are informed by this work, and he is especially concerned with land stewardship. He holds an M.F.A. in painting from the University of Mississippi.

Benny's community project: Saturday, June 7 from 10am-12:30pm, Waitt Science Classroom. He will host a workshop in monotype printing using water-based media and a printing process that he has developed.

Cathleen Faubert, Photography, Scent In Residence: June 1 to June 22

Cathleen is an Assistant Professor of Art, Technology & Culture at the University of Oklahoma. She is interested in scent and it's growing role in the visual arts. Aromatic materials, alchemical possibilities and cultural symbolism are central to her recent work. She collects botanicals, uses steam distillation, and creates scents that reference specific regions, to allow her viewers the personal memory associations that scent can create.

Cathleen's community project will take place Saturday, June 21 in the Pammel Stone Lab (time tbd). She will lead a nature walk that focuses on olfactory experience. Participants will collect botanicals, distill them, and create a fragrance that represents their memories of the walk.





2014 Artists in Residence

Amanda Maciuba, Printmaking, Bookmaking, Social Practice

In Residence: July 5 to July 19



Amanda is a native of Buffalo, NY, and is currently pursuing her Masters of Fine Arts in Printmaking and a graduate certificate in Book Arts at the University of Iowa. Amanda's work focuses on how communities alter their landscapes (suburban homes, city planning), and how this affects the environment and the people who live there. She enjoys the tactile nature of books as a format that can engage the viewer on a personal level.

Amanda is a founding member of Emerging Leaders in the Arts Buffalo, and part of the planning committee for Painting for Preservation, Buffalo.

Amanda's community project: Saturday July 12, Waitt Community Classroom, 9am-1pm. She will host a workshop where participants make their own field-journals, then join the artist and a scientist on an art-science nature walk.

Paul Crowe, Sculpture, Video, Photography

In Residence: July 5 – July 26

Paul's work explores the shifts in natural things, such as the changing shoreline of lakes or the disappearance of trees from an orchard. He has coordinated some of his past art with the weather – snow falling on his light sculptures, for example, so that the work slowly disappears – allowing the environment to alter his work.

Paul received his MFA from the University of Southern California in 2005. He is now an Assistant Professor of Art at Weber State University in Ogden, Utah.



Paul's community project: Sunday, July 20th, Mahn Hall, 1pm-5pm. He will host a conversation that demystifies contemporary works of environmental art that viewers might find unusual or difficult to understand. Then, he will lead participants in workshop where they create an environmental work of art together.



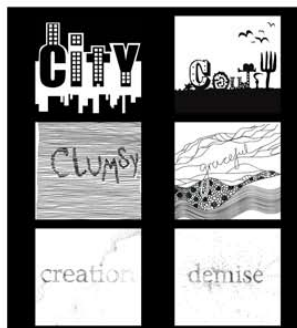
2014 Artists in Residence

Aurora Green, Graphic Design

In Residence: July 5 to July 19

Aurora is a graphic design student at the University of Iowa. She enjoys clean, organic design and would like to go into packaging design in the future. Aurora also enjoys painting, drawing, printmaking, and is involved in theatre.

Aurora designed the Lab's AIR graphic materials for 2014 and will work with the Lab's community programs while she is in residence.



Lisa Johnson, Sculpture

In Residence: May 29 – July 20



Lisa is the Coordinator of the Lakeside's Artist-in-Residence Program. Her sculptures explore our relationship to the landscape and to one another. She is especially interested in our hidden histories, and in the cultural mythologies we create about our history with the landscape.

Lisa recently studied traditional weaving in Guatemala. This summer, she plans to explore large-scale weaving as a way to connect different land areas.

2014 6 artists & 20 scientists a whole community

The
Iowa Lakeside
LABORATORY *Regents Resource Center*

2014 Artist-in-Residence Community Programs

Lakeside Lab is located on Hwy 86 across from the Wahpeton water tower. For more information email 14brushes@gmail.com or call 712-337-3669 ext.1 www.lakesidelab.org

ALL ARTISTS' PROGRAMS ARE FREE
& MATERIALS ARE PROVIDED



PLANTS TO PRINTS WITH ALLEN MORRIS

Saturday May 17
Waitt Lab Science Classroom
10am-12:30pm (creation of images)
4pm-5:30pm (discussion and pick up)

Allen is a photographer from Lincoln, NE. His workshop will teach "anthotype printing," a sustainable process that uses plant matter and sunlight to develop photographs. Participants will learn how they can use almost any backyard plant to create a simple and eco-friendly photo developer.

ALL AGES WELCOME

MONOTYPE PRINTING WITH BENNY MELTON

Saturday June 7
Waitt Lab Science Classroom
10am-12:30pm

Benny is a Mississippi-based painter who focuses his work on people and their relationship to the landscape. In this workshop, he will teach a basic monotype printing method using water-based media and a printing process he has developed.

ALL AGES WELCOME



A LINE THROUGH SCIENCE & ART WITH JACOB GORKE

Date and time tbd,
please contact
14brushes@gmail.com
for details.

Jacob is a NY-based artist whose project works directly with the field classes at Lakeside. He will offer an artistic biological survey for science students. Participants will collect and present specimens using scientific and artistic techniques.

THIS WORKSHOP IS GEARED TOWARDS
SCIENCE STUDENTS AGES 18 AND UP

BOTANICAL DISTILLATION & SCENT MEMORY WITH CATHLEEN FAUBERT

Cathleen is a photographer interested in the role scent plays in our memories of place. Participants will gather botanicals, learn steam distillation, and hand-craft a fragrance reminiscent of their time outdoors.



Saturday June 21
Pammel Laboratory
9:30am -12pm
(nature walk & collection)
1pm-3:30pm (distillation)

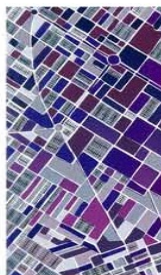
LUNCH INCLUDED.
AGES 10 AND UP

MAKE AND TAKE FIELD JOURNALS WITH AMANDA MACIUBA

Saturday July 12
Waitt Lab Community Classroom
9am-12:30pm

Amanda is a book artist, printmaker, and papermaker. In this workshop participants will make their own field journals, then join the artist and scientist Mike Lannoo on a nature walk. A unique opportunity to explore Lakeside's natural areas from both arts and science perspectives!

AGES 10 AND UP



UNDERSTANDING (AND MAKING!) ENVIRONMENTAL ART WITH PAUL CROW

Sunday, July 20
Mahan Hall
1pm-5pm



Utah-based artist Paul Crow will discuss contemporary environmental art, then lead the group to create works of art using materials found on the Lab's grounds. Bring comfortable shoes to take a short walk as you gather materials.

ALL AGES WELCOME



LAKESIDE LAB'S 2014 ARTISTS IN RESIDENCE


2. **Re-establish research and teaching opportunities between ILLRRC and the Regent universities.**


Achieving this goal continues to be a challenge. There is teaching participation from ISU and UNI and administrative representation from SUI. The three provosts have been asked to designate an institutional representative to engage in identifying courses and faculty to teach at the Center. This effort will be supplemented by (1) extending the on-site teaching time to allow for the development of an on-going environmental research program; (2) requesting that the universities review selected Center courses and co-list the courses so that students can more easily see how the courses fit into their programs of study; and (3) formalizing the position of Academic and Research Director to provide leadership to teaching and research.


3. **Establish a working relationship with the independent colleges and universities to attract both students and faculty.**

Center staff met with the president of the Iowa Association of Independent Colleges and Universities to present information about the Lakeside Lab to institutional presidents. The Center has employed Dr. Paul Weihe in the Department of Biology at Central College to develop and teach a wetlands and stream ecology course. He is uniquely suited to teaching this course; the Center anticipates that, as Dr. Weihe learns about the opportunities at Lakeside Lab, he will serve as a contact to the other independent colleges and universities.

4. **Establish selected seminars by nationally regarded scholars.**

 Population Ecology and Human Health. The relationships between population ecology and human health will be explored. Important topics will include the intersection of the ecology of organisms and human health, how humans interact with biological and physical environments in ways that promote or harm human health, and how threats to human health are assessed and monitored. This public seminar accompanies a formal course, both of which will be conducted by Dr. Viktor Bovbjerg from Oregon State University.

 Fire Ecology. This seminar will begin with the Big Burn of 1910 which has influenced fire control policy for generations and proceed to present-day problems of an expanding wildland-urban interface, warming trends that result in violent fire and extended fire seasons, and mounting fire suppression costs accompanied by budgetary constraints. These issues surfaced in the Yarnell Hill Fire of 2013 which cost the lives of 19 hotshot firefighters. This seminar will be conducted by John Maclean, former Chicago-Tribune reporter, book author, and authoritative presenter to professional and lay groups.

 Environmental Writing. William Souder, environmental author and presenter, will explore three classics of the genre whose authors captured a year in the life of the natural world - Henry Beston's *The Outermost House*, Aldo Leopold's *A Sand Country Almanac*, and Annie Dillard's *Pilgrim at Tinker Creek*.

- “On the bookshelves of many a contemporary environmental journalist looms at least one canonical text she’s hesitant to read. For this reviewer, it was Rachel Carson’s *Silent Spring*, among the gloomiest books ever written, an unrelenting catalog of crimes committed by man against nature. But after reading William Souder’s engrossing new biography of Carson, *On a Farther Shore*, I returned to the book and discovered its central message to be – depressingly – timeless. Substitute organic pesticides and herbicides with the endocrine-disrupting compounds found in everyday household items or the creep of chemicals used in hydro-racking, and you may experience the same hair-pricking alarm felt by Carson’s readers 50 years ago.” Elizabeth Royte, *New York Times*

5. **Market the online capability of the Regent universities.**

The Regent Enterprise includes three Resource Centers in western Iowa - Southwest Iowa Regents Resource Center (SWIRRC), Northwest Iowa Regents Resource Center (NWIRRC), and the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC). The goal to include the ILLRRC as part of joint print publications and websites was delayed due to the amount of staff time devoted to bringing NWIRRC online. The State Extension and Continuing and Distance Education Council (SECDEC) approved the concept; the project will be completed in collaboration with the University of Northern Iowa in Fall 2014. This will result in a common format and look for the western part of the state. In the interim, the universities continue to use the IRIDE website which represents the three universities (<http://www.continuetolearn.uiowa.edu/iride/>).

6. **Other activities and goals.**

- 📖 The Center will continue to work closely with the Friends of Lakeside Lab. This relationship allows the ILLRRC to benefit from member leadership (many members serve on other local and national boards), support for public programs, and scholarships for college and secondary school students.
- 📖 The Lab’s Educational Coordinator, in cooperation with the Friends of Lakeside Lab, has applied for a third year of funding from the Nature Connections Institute for the *Young Investigators Connecting Children with Nature through Project Work (YI)*. On-going funding will enable the Center to continue providing this high-quality professional development program focused on nature-based learning to teams of early childhood teachers and leaders in Northwest Iowa. Critical components leading to sustainability include collaborative learning, continuity of professional development (teams must commit for three years), coaching, interactive learning, and the promise of more effective outcomes for outdoor education.
- 📖 There is continued reorganization of the administrative structure. Within two years, the Center will hire a full-time administrator with a terminal degree in a science area to administer and teach at the Lab. This revised administrative structure will reflect the main focus of the Lab, which is teaching and research, while continuing to develop community and outreach programs.
- 📖 The Center continues to reclaim the shoreline by removing invasive species with the assistance of grants from the Okoboji Foundation and the Iowa Department of Natural Resources. The grant from the Okoboji Foundation has also provided materials and help to reestablish trails along West Lake Okoboji and the ILLRRC campus.

- 📖 During Summer 2013, UNI's EPSCoR Energy Institute Summer Workshop envisioned a plan for the renovation of the Faculty Cottage. Professor Ulrike Passe of the Center for Building Energy Research at ISU, together with students, designed a retrofit sustainable exterior for the building. The Center is exploring the possibility of constructing the new exterior as part of a UNI class/workshop.
- 📖 In June 2014, the Board of Regents accepted a donation of a home and its relocation to the ILLRRC. The donation is an exceptional opportunity for the Center because it will provide housing for professional staff and/or visiting faculty and scholars who teach and conduct research at the Laboratory. The Center is also investigating procurement of a large machine shed to house maintenance equipment.
- 📖 The Center will continue to expand activities while concentrating on the main goal of re-establishing the relationship between Lakeside Lab and the Regent universities and the missions of teaching, research, and service.

2014 – 2015 PROPOSED BUDGET¹

IOWA LAKESIDE LAB REGENTS RESOURCE CENTER	FY 10 Actual	FY 11 Actual	FY 12 Actual	FY 13 Actual	FY 14 Estimated	FY 15 Budget
REVENUE						
Carry forward	\$407,074	\$217,794	\$153,439	\$71,557	\$65,554	\$65,698
Regent university allocation	\$565,793	\$557,231	\$548,338	\$562,046 ²	\$573,286	\$584,751
Room and board	\$64,869	\$66,300	\$67,177	\$67,965	\$74,007	\$74,000
Center revenue	\$95,916	\$99,271	\$73,265	\$80,858	\$85,331	\$88,810
Friends support non-credit education program		\$30,000	\$33,000	\$33,062	\$48,840	\$45,000
Course fees	\$3,186	\$7,119	\$3,640	\$1,953	\$6,065	\$0 ³
TOTAL REVENUE	\$1,136,838	\$977,715⁴	\$878,859	\$817,440	\$853,082	\$858,259
EXPENDITURES						
Salaries and benefits	\$408,620 ¹	\$388,851	\$403,483	\$476,899 ²	\$437,021	\$444,000
Travel and hospitality	\$39,901	\$33,455	\$41,078	\$31,679	\$36,001	\$49,000
Supplies and other	\$70,305	\$60,879	\$45,025	\$59,421	\$70,412	\$60,000
Utilities	\$46,334	\$42,622	\$35,416	\$45,820	\$55,647	\$50,000
Maintenance and repairs	\$257,094 ⁵	\$132,810	\$166,667	\$94,817	\$96,757	\$120,000
Equipment	\$36,701	\$35,267	\$18,329	\$18,513	\$43,022	\$25,000
Marketing	\$3,656	\$389	\$1,963	\$4,713	\$0	\$5,000
Tuition allocation to ISU/UNI/SUI	\$29,097 ⁶	\$121,496 ⁷	\$58,472	\$0	\$22,920	\$25,000
Debt service	\$17,014	\$8,507	\$0	\$0	\$0	\$0
Scholarship expense			\$36,869	\$20,024	\$25,604	\$35,000
Operational planning	\$10,322	\$0	\$0	\$0	\$0	\$0
TOTAL EXPENDITURES	\$919,044	\$824,276	\$807,302	\$751,886	\$787,383	\$813,000
NET BALANCE	\$217,794	\$153,439	\$71,557	\$65,554	\$65,698	\$45,259

¹ Decrease due primarily to unfilled ISU coordinator position and office manager retirement.

² Includes 2.5% approved salary increases.

³ Due to a recent policy change, course fees are now filtered through the appropriate academic administrative unit – University College.

⁴ FY 2011 – Received a gift from Lavonne Foote Estate in the amount of \$100,000 to improve the campus. This gift was non-operating and was not included in the report.

⁵ Includes improvements to main cottage, facilities manager's house and bathhouse, new roofs for stone labs, life-safety improvement, IT upgrades.

⁶ Tuition transfers to ISU and UNI for Summer 2008 and Summer 2009.

⁷ Tuition transfers to ISU and UNI for Summer 2010 and SUI tuition transfers for Summer 2008 - 2010.

IOWA LAKESIDE LABORATORY REGENTS RESOURCE CENTER 2013 STRATEGIC PLAN

Strategic Planning Committee

Chairperson: Stephen D. Hendrix (Biology, SUI)

Members: Tom Bedell (Friends of ILL), Lee Burras (Agronomy, ISU), Kavita Dhanwada (Biology, UNI), Diana Gonzalez (CAO, Board of Regents), Mike Lannoo (Indiana University School of Medicine), Mary Jean Montgomery (Friends of ILL), Sue Richter (Friends of ILL)

Report Summary

The Strategic Planning Committee reviewed numerous reports, plans, and other documents, all of which showed a consistent vision for Iowa Lakeside Laboratory. These documents, along with discussion by the committee, informed the creation of a new mission statement. This statement incorporates the traditional values and goals of Iowa Lakeside Laboratory with new ones reflecting its role as a Regents Resource Center. Previous reports and this Strategic Planning Committee observed the difficulty of reaching articulated goals; simultaneously those reports make numerous suggestions for improvements, many of which continue to hold merit. The major problem facing ILLRRC in attaining the goals of its mission is the failure to develop an administrative structure that can effectively implement (or discard for any variety of reasons) the many recommendations made previously in reports and by committees like this one. Indeed, ideas to improve ILLRRC continue to be made by numerous individuals associated with ILLRRC who remain passionate about the facility and its possibilities.

Outreach programs are strong, but could be strengthened if vigorous effort is put into initiating recommendations in this report. Academic programs critical to the mission of ILLRRC have struggled to maintain enrollments and a stable offering of courses. Recommendations are made to improve the student and faculty marketing/recruiting efforts for ILLRRC courses at Regent institutions and other colleges and to seek the incorporation of immersion field study courses as a specific requirement in majors at Regent institutions, both of which were identified as major problems facing the academic program. The Strategic Planning Committee also recognized the connection between academics and research at ILLRRC such that simultaneous improvement in both will have significant synergistic effects on attaining the goals of each. Specific recommendations have been made to encourage research at ILLRRC to revitalize this important component of the Lab's mission. An administrative recommendation is that the Executive Director position be reassigned to a different Professional and Staff category and that the position be redefined with appropriate qualifications, requirements, and duties to attain the outreach, academic, and research goals in the mission statement. Also recommended is the creation of an Advisory Board to assist the Executive Director and staff of ILLRRC in reaching its goals.

Introduction

The charge to the committee was to evaluate and suggest ways to improve outreach programs, academic programs, and the present administrative structure to fulfill the mission of ILLRRC. For each topic, the committee was provided a summary of relevant statements from previous reports, plans, and sets of potential recommendations to discuss and evaluate.

The following mission statement was developed and approved by the Strategic Planning Committee. It reflects the many different purposes of ILL as an RRC. The opening paragraph can be used as an abbreviated mission statement; the next two paragraphs summarize objectives and core values.

Mission Statement

The mission of the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) is to provide facilities and programming as a field station and community resource to support scientific education, research, and outreach programs of the Regent universities and other institutions. The education and research programs as well as collaborative activities of the ILLRRC also address state, national and international needs such as lifelong learning, entrepreneurial education, and economic development.

Science Education, Research, and Outreach Objectives

The ILLRRC offers and encourages science-based courses and learning opportunities that allow students from early childhood through adulthood to study nature first-hand. Core values include integrated research and education and the unique value of immersion learning in a natural setting. An objective of ILLRRC is to be recognized internationally as a premier site for the study of nature in nature. The primary research focus is on the diverse ecosystems that surround ILLRRC, with special emphases on water quality and the biodiversity of pristine or restored environments.

Lifelong Learning, Entrepreneurship, and Economic Development Objectives

Core values include ILLRRC's commitment to collaborations through partnerships and advocacy for the use of scientific research to inform public policy and economic development. To achieve these objectives, ILLRRC provides lifelong scientific and cultural learning opportunities to citizens of Iowa and beyond with on-site and distance learning programs. ILLRRC, in partnership with the Regent Universities, also sponsors on-site entrepreneurial educational workshops for students attending the Regent Universities.

Outreach Programs

The outreach programs are thriving and represent greatly improved, important connections to the Lakes Region community since Iowa Lakeside Laboratory became a Regents Resource Center in 2006. The Education Coordinator has indicated that secondary school outreach programs are at or near maximum enrollment given current staffing. The Okoboji Entrepreneurial Institute is a success. The recent development of a collaborative public arts and science project has increased important connections between the arts, ILLRRC, and the community of northwest Iowa. Finally, an early childhood consortium at the Lab provides unique opportunities for professional development on nature-based teaching and learning.

The Strategic Planning Committee identified five areas to be considered to improve the diversity of outreach offerings at ILLRRC and stimulate the connections between the ILLRRC and Iowa community of teachers, students, and citizens.

Outreach Programs Recommendations

1. Investigate a role for ILLRRC in implementation of the Iowa Core Curriculum and STEM initiatives.
2. Increase workshops that function as outreach for community lifelong learning to enrich citizens, students, and faculty of ILLRRC.
3. Reinvigorate the role of ILL in training and professional development of new and current teachers.

4. Increase course offerings available to high school students eligible to take college courses.
5. Increase internship opportunities in coordination with Friends of Lakeside Lab and other groups.

Academic Programs

The Strategic Planning Committee adopted the following Statement of Curricular Philosophy: "All undergraduate academic courses and outreach programs offered at ILLRRC will take advantage of the immersion learning opportunity available on site and in the surrounding natural ecosystems. All courses will seek to use an inquiry-based approach incorporating the scientific process and emphasizing the study of 'nature in nature'."

Academic courses offered to students at the university or college level at ILLRRC are the *raison d'être* of Lakeside's establishment and continue to be a core component of ILLRRC's mission; they must inform our partnerships with the community and other organizations. The success of these academic programs is linked to the success of research programs because students are attracted by both the quality of the faculty and the nature of the courses. Committed faculty with Lakeside research programs are more likely to be attracted to teach at the Lab, will be more likely to bring students with them, and will help promote the Lab at their home institution. Therefore, implementation of recommendations for Academic Programs and Research should be simultaneous.

Academic programs have struggled to maintain enrollments. Lack of effective promotion of the ILL courses at the Regent universities and colleges is a major problem and present visibility of ILLRRC on the Regent campuses is low. Interactions between the ILLRRC administration and the various academic units at Regent institutions are sporadic, unproductive, and not likely to produce a vibrant academic (or research) program as envisioned in the new mission statement. The Strategic Planning Committee noted that incorporation of field-oriented, immersion courses such as offered by ILLRRC as a specific requirement for academic majors has only occurred in the Environmental Science major at SUI. In the University catalogues, Lakeside courses are scattered throughout large menus (e.g., Environmental Science) or they are mentioned as a group in a large menu (Biology). A number of improvements were suggested.

Academic Programs Recommendations:

1. Educate faculty and advisors in appropriate departments at Regent institutions about advantages/uniqueness of Lakeside courses.
2. Promote the ILLRRC courses directly to students in appropriate classes at Regent institutions and other colleges.
3. Promote the integration of field-oriented, immersion courses as a specific requirement into curricula at ISU and UNI.
4. Continue to diversify outreach programs with additional emphasis on offerings that cross-over between science and the arts.

Research Program

Research has been recognized as a cornerstone of Lakeside Lab's mission as emphasized in its long history at the Lab, as well as by statements in the 2006 Strategic Plan and subsequent annual reports. Noteworthy areas of successful research programs are the water monitoring program conducted by Waitt Hall (and the State Hygienic Lab) and the Diatom Lab which has a rich history with a national and international reputation. Other areas of research, such as prairie ecology, wetland ecology, and limnology, that have had a presence at the Lab in the past, are now largely lacking. Today, the Lab is used primarily by a few researchers as a result of their association with the Lab and a relatively small number of graduate students. Some of the previous documents have offered lists of hurdles to invigorating these other areas of research, while others have suggested ways to improve research productivity at the Lab. Unfortunately, no program to reinvigorate research has been created and executed. Research possibilities are not promoted at the Regent institutions and there is no effort to recruit researchers. Considerable discussion by this Committee and others has been devoted to the problems recruiting researchers and many potential solutions to these problems have been suggested.

Research Program Recommendations

1. Formalize research areas (e.g., Prairie Ecology, Wetland Ecology, Limnology, etc.) not now recognized or emphasized at ILLRRC (such as Water Quality and Diatoms) while simultaneously seeking funding from industries and national, state, and local agencies that benefit from sound, unbiased environmental information. An emphasis on reclamation and restoration of ecosystems and long-term ecological monitoring may be a useful starting approach. The Committee recognized that naming/branding research programs at ILLRRC is important, but did not reach a recommendation on naming research programs.
2. Determine the needs of researchers, particularly with respect to housing and the specifics of their research programs, with the goal of facilitating lab use by faculty, post-doctoral students, graduate students, and undergraduates for research purposes.
3. Pursue the creation of an information/data management portal for legacy data at ILLRRC and for new ecological data as it is created by monitoring and research programs.
4. Investigate mechanisms to incorporate modern molecular techniques into the research capabilities of ILLRRC. Such techniques can be powerful tools to monitor invasive species and should be incorporated into monitoring programs involving the public.
5. Increase programs featuring world-class scientific speakers to stimulate students and faculty intellectually and increase topical workshops to reconnect scientists and scientific information to the community.

Administration

Administration of ILL was envisioned historically as potentially either a one-person position (a possibility included in the 2004 Friends Business Plan) or a two-person position with a Director of Operations and Outreach and a Director of Academics and Research. Regardless, the many roles of the Executive Director(s) are crucial to the success of ILLRRC as envisioned in the new mission statement. An ideal single executive director should have the ability to 1) maintain the present outreach programs and create new ones, 2) promote and enhance academic activities, including creation of innovative courses and attraction of a diverse, vibrant faculty and student population, 3) stimulate research activities with creative programs to attract researchers,

4) maintain and promote positive interactions with the local community, and 5) assist in fund raising activities, and direct the maintenance and improvement of the ILLRRC facilities.

This set of professional abilities demands a person with unique qualifications including strong leadership skills, an established record of successful outreach activities, an outstanding record of original research, qualifications for an academic position in an existing department in a Regent institution, and an established record of fund raising in the scientific and public arenas. In addition, the Okoboji region should be the executive director's primary site of residence.

Given that a change in administrative structure will be a slow process, the Committee makes a long-term and a short-term recommendation.

Administration Long-term Recommendation (to be executed in the next 12 months)

Reclassify the Professional and Staff position from Academic Support to Administration, and redefine qualifications and requirements for the position.

Administration Short-term Recommendation (to be executed immediately)

Appoint an interim Director of Academics and Research to promote and enhance academic activities, and stimulate research activities.

The Strategic Planning Committee recognized that effective attainment of goals in the mission statement will be enhanced by advice from knowledgeable individuals at regular intervals. Therefore, the Committee made the following recommendation.

Create an Advisory Committee of members of the academic/administrative communities of SUI, UNI, and ISU, ILLRRC alumni, and members representing interested groups (e.g., Friends of Lakeside Lab).

The Strategic Planning Committee did not reach any conclusion about the viability of the current Curriculum Committee, although it was generally agreed that the functional role of this entity is dubious.

Charge to the Iowa Lakeside Laboratory Regents Resource Center Planning Committee

Over the past five years the Iowa Lakeside Laboratory Regents Resource Center has attained administrative and financial stability, and made important advances in some critical areas such as educational and scientific outreach programs. An assessment of progress with a strategic view toward positioning ILLRRC to make even greater contributions to the citizens of Iowa and the scientific community is now both timely and needed.

The Planning Committee shall assess progress and propose a strategic vision and goals to enhance each of the following:

1. Mission statement
2. Curricular program for undergraduate students
 - a. Curricular philosophy
 - b. Outcomes assessment instruments
3. Graduate program

4. Educational and scientific outreach programs
5. Research programs and potential research centers of excellence
6. Administrative structure
7. Usefulness of a potential ILLRRC Advisory Committee
8. Funding, marketing and promotion of ILLRRC

Iowa Lakeside Laboratory Background

- ◇ The Lakeside Laboratory campus, established in 1909, is a residential facility located on the shores of West Okoboji Lake. The campus, most of which is a nature preserve used as an outdoor classroom, includes more than 140 acres.
- ◇ From 1909 to 1936, the Laboratory was operated by the Iowa Lakeside Laboratory Association of the Alumni and Friends of the University of Iowa.
- ◇ In 1936, the Association deeded the property to the State of Iowa Executive Council under provision of the Trust Agreement of April 30, 1936. The agreement states that the Laboratory shall be used for “the accommodation, promotion, support, and maintenance of scientific studies and research in the field of biological sciences.”
- ◇ From 1936-47, the Laboratory was administered by a Board of Managers representing the State Conservation Commission (now DNR), the State Board of Education (now Board of Regents), Iowa Lakeside Association, the U.S. Fish and Wildlife Service, and the University of Iowa.
- ◇ In 1947, the Board of Regents assumed responsibility for the Laboratory. Since then, it has been run cooperatively by Iowa State University, the University of Iowa, and the University of Northern Iowa through the Board of Regents.
- ◇ In December 2004, the Board of Regents approved a Business Plan for the Laboratory which focused on increasing the availability of educational offerings, including providing year-round activities.
- ◇ Between 1997 and 2006, the credit enrollment at the Laboratory ranged from a high of 185 students in 1997 to a low of 83 students in 2005 and 2006. The lack of substantial scholarship and grant funds has prevented students and faculty from participating more fully at the Laboratory.

Expanded Lakeside Laboratory Functions

The Lakeside Laboratory Regents Resource Center encompasses the following functions which will be provided on a full-cost recovery basis.

- ◇ *Scientific Field Research.* The purpose of this function is to continue the Lakeside Laboratory as a field station that supports the science programs, including education, research, and outreach, of the Regent institutions and the Lakeside Consortium.
- ◇ *Lifelong Learning.* The purpose of this function is to provide needed learning opportunities to the citizens of northwest Iowa. The Center executive director will work with the programmatic and distance education administrators at each of the Regent universities to determine the need for programs/courses in northwest Iowa. The universities will provide the instruction and faculty. Other postsecondary institutions seeking to offer distance education courses at the Center will work through the Center executive director to ensure that there is no conflict of interest. Cultural offerings that support the liberal arts mission of the Regent universities will be provided as appropriate. Services that support the Regent



universities' programs in social work, health, and similar areas will be provided through the Center.

- ❖ *Entrepreneurship.* The purpose of this function is to expand the entrepreneurial educational opportunities for Regent university students. The Center executive director is responsible for working with the Regent universities to provide entrepreneurial workshops at the Center.



- ❖ *Economic Development.* The purpose of this function is to address the Board of Regents' role in economic development in partnership with the Iowa Department of Economic Development, the community college system, private colleges, local governments, and regional economic development organizations. This approach will create a model for cooperative rural economic development through educational opportunities and collaborations with other community resources that can be replicated throughout Iowa.



- ❖ *Community Involvement.* The purpose of this function is to obtain community support for the Center that will result in endowment funds for the long-term operation of the Center, including tuition and housing assistance for students, faculty research grants, housing assistance for faculty, and acquisition and maintenance of a specialized equipment pool. The immediate goal for the endowment is \$600,000.

